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ABSTRACT

This conceptual model for explaining the factors and processes that underlie family adaptation in the Army relies heavily upon two traditions: the "Double ABCX" model of family stress and adaptation and the "Person-Environment Fit" model. The new model has three major parts: the environmental system, the personal system, and family adaptation. This model provides a framework for the identification, definition, and measurement of conceptual domains for addressing the role of family factors in retention, readiness, and sense of community. The model identifies factors which buffer and moderate role demands and their consequences at the personal, family, community, and Army levels of analysis. It theoretically grounds the research on role demands and their link to family adaptation, discusses and nominally defines conceptual domains and subdimensions in the model, and specifies a number of propositions which are derived from the model for empirical grounding, specification, and testing. Such conceptual clarification and modeling are precursor steps to the empirical specification of testable models, rich with operational measures and testable research hypotheses which are responsive to project objectives. This proposed model provides important structure for directing the next phase of project activities, especially the design of the survey instruments for the field investigation. (Author/ABL)

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Technical Report 880

The Family Adaptation Model: A Life Course Perspective

Gary L. Bowen
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The University of North Carolina at Chapel Hill

February 1990

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United States Army Research Institute
for the Behavioral and Social Sciences

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This research supports The Army Family Action Plans (1984-1989) by developing a conceptual model of factors that influence the adaptation of service members and their families to the demands they face from occupying social positions within three life domains: work, family, and community.

The development of the family adaptation model is the result of a number of interrelated activities that include literature reviews, secondary analysis of available datasets, expert/user consultations, and field visits to conduct individual and focus-group interviews with soldiers, family members, Army leaders, and service providers. The model will be refined through subsequent research activities.

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Additional products from the model building process include a set of heuristic propositions that will be refined and tested later in the project and conceptualization of how the family life cycle and the career life cycle affect each other over time.

The family adaptation model provides a framework for the identification, definition, and measurement of conceptual domains for addressing the role of family factors in retention, readiness, and sense of community. It has made an impact on the development of data collection instruments for the Army Family Research Project. The conceptual framework presented in the model will be used in developing hypotheses for the data analysis effort. The Army sponsor for this research, the U.S. Army Community and Family Support Center (CFSC), reviewed and approved an earlier draft of this report. Their comments indicate that they agree that the model will be useful in guiding R&D for Army programs and policies.

Technical Report 880

The Family Adaptation Model: A Life Course Perspective

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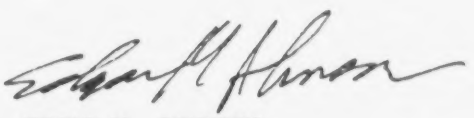
FOREWORD

The Army Family Research Program (AFRP) is a 5-year integrated research program started in November 1986 in response to research mandated by the CSA White Paper, 1983: The Army Family and subsequently by The Army Family Action Plans (1984-1989). The research supports The Army Family Action Plans through research products that will (1) determine the demographic characteristics of Army families, (2) identify positive motivators and negative detractors to soldiers remaining in the Army, (3) develop pilot programs to improve family adaptation to Army life, and (4) increase operational readiness.

The research is being conducted by the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) with assistance from Research Triangle Institute, Caliber Associates, HumRRO, and the University of North Carolina. It is funded by Army research and development funds set aside for this purpose under Management Decision Package (1U6S).

The family adaptation model presented in this report provides a framework for the identification, definition, and eventual operation and measurement of conceptual domains for addressing the role of family factors in retention, readiness, and sense of community. The model has made an impact on the development of data collection instruments for the Army Family Research Project. The conceptual framework presented in the model will be used in developing hypotheses for the data analysis effort. The Army sponsor for this research, the U.S. Army Community and Family Support Center (CFSC), reviewed and approved an earlier draft of this report. Their comments indicate that they agree as to the utility of the model in guiding R&D that will impact on Army programs and policies.



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THE FAMILY ADAPTATION MODEL: A LIFE COURSE PERSPECTIVE

EXECUTIVE SUMMARY

Requirement:

To support The Army Family Action Plans (1984-1989) by developing a conceptual model of factors that influence the adaptation of service members and their families to the multiplicity of role demands they face from occupying social positions within three life domains: work, family, and community.

Procedure:

The development of the family adaptation model is the result of a number of interrelated activities that included literature reviews, secondary analysis of available datasets, expert/user consultations, and field visits to conduct individual and focus-group interviews with soldiers, family members, and Army leaders and service providers. The model will continue to be refined and specified through subsequent research activities.

Findings:

The conceptual model for explaining the factors and processes that underlie family adaptation in the Army relied heavily upon two traditions: the "Double ABCX" model of family stress and adaptation used by McCubbin and his associates and the "Person-Environment Fit" or the "P-E Model" used by French and his associates. The new model has three major parts: the environmental system, the personal system, and family adaptation.

Additional products from the model building process included a set of heuristic propositions from the model that will be refined and tested later in the project and further conceptualization of how the family life cycle and the career life cycle affect each other over time.

Utilization of Findings:

The family adaptation model provides a framework for the identification, definition, and eventual operationalization and measurement of conceptual domains for addressing the role of family factors in retention, readiness, and sense of community. It has impacted on the development of data collection instruments for the Army Family Research Project. The conceptual framework presented in the model will be used in developing hypotheses for the data analysis effort. The Army sponsor for this research, the U.S. Army Community

and Family Support Center (CFSC), reviewed and approved an earlier draft of this report. Their comments indicate that they agree as to the utility of the model in guiding R&D that will impact on Army programs and policies.

THE FAMILY ADAPTATION MODEL: A LIFE COURSE PERSPECTIVE

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THE FAMILY ADAPTATION MODEL: A LIFE COURSE PERSPECTIVE

Introduction

The Army Family Research Program, Family Factors in Retention, Readiness and Sense of Community, is a five-year program of integrated research activities designed to address major research issues in The Army Family Action Plan I (Office of the Deputy Chief for Personnel, U.S. Army, 1984). Conducted under the auspices of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI), and sponsored by the U.S. Army Community and Family Support Center (CFSC), a major aim of the research is to assist Army policy and program leaders in designing and improving policies, programs, and practices that contribute to retention and readiness by facilitating the level of adaptation that service members and their families make to the military lifestyle.

For purposes of conducting developmental research activities, the research program was divided into four overlapping conceptual areas: (a) Family Adaptation, (b) Family Factors and Retention, (c) Family Factors and Readiness, and (d) Spouse Employment. A major charge in each of these areas is the development of a conceptual model to address key research questions, including the identification, definition, and eventual measurement of conceptual domains for purposes of guiding secondary analysis of existing data sets, directing exploratory field investigations, and conducting a core research effort which will involve a multimethod field investigation of a probability sample of 40 installations, 480 units, 4,000 single soldiers, and 16,000 married soldiers and their spouses. Such conceptual clarification and modeling are critical first-order tasks both in theory development and in the design of intervention strategies (Shehan, 1985). This process involves several interrelated activities: (a) identifying conceptual domains relevant to the area of inquiry, (b) proposing linkages between these conceptual domains based on theoretical review and consideration, (c) specifying underlying conceptual subdimensions of each concept, (d) providing nominal definitions of these conceptual subdimensions to guide their operationalization and measurement, and (e) developing propositions for purposes of generating empirically testable models and hypotheses. In terms of the present research effort, a major intent is to facilitate communication among research teams in project planning and coordination, especially in the development of operational measures for the core survey effort which have a consistent rationale and an underlying theoretical justification.

This report addresses the requirement for a conceptual model within the area of family adaptation. Its aim is to identify factors that are related to one of the major links between the Army and its families: the ability of families to adapt to the combination of organizational and family-related role demands. Based largely on the combined influence of the Double ABC-X Model of McCubbin and associates (McCubbin & McCubbin, 1987; McCubbin & Patterson, 1983) and the Person-Environment Fit Theory of French and associates (French, Caplan, & Harrison, 1982), the proposed model focuses on the influence of role demands from work and family life on the level of family adaptation as moderated by the influence of Army policies, programs and practices at higher headquarters, installation, and unit level; the availability and strength of

adaptive resources in the environment; and the personal resources, values and expectations of the individual. In addition to its heuristic implications for the present program of research, use of this model should help Army policy-makers and program planners to: (a) conceptualize better their efforts in support of service members and their families, (b) develop an agenda of basic and applied research on the nature and impact of work and family demands, (c) evaluate systematically the impact of current policies, practices, and programs on behalf of service members and their families on Army-related and family-related outcomes, and (d) specify the policy and program initiatives that will help maximize the ability of both the Army organization as well as its service members and their families to meet successfully their respective demands.

After briefly reviewing both the context and the historical roots of the theoretical model, the broad conceptual domains within the model are specified, including a discussion of their interrelationships and an identification of the component subdimensions within each conceptual domain. These component sub-dimensions in the model are next discussed and nominally defined, followed by the delineation of propositions derived from the model. The importance of adopting a life course perspective to understanding variations in work and family demands and their consequences for the family system is subsequently presented, including a discussion of the family life cycle, the work career life cycle, and the intersection of the family and work career cycle as exogenous constructs in the proposed model. The overall aim is to present a systematic, theoretical framework with nominally defined constructs for quantifying the relationship between role demands and family adaptation. This will be a vehicle for developing operational measures and will serve as a heuristic guide for deriving and testing empirically testable models and hypotheses.

The development and description of the proposed conceptual model reflects a synthesis of a number of interrelated activities which have been conducted by the Family Adaptation Research Team over the last 18 months of the project. These activities included literature reviews (Bowen, 1987b, 1987c, 1987d; DeJong, 1987a, 1987b; Neenan, 1988; Stawarski, 1987; Styles, 1987a; 1987b), secondary analysis of available datasets (Bowen, 1988a, 1989a; Bowen & Neenan, 1988), expert/user consultations, as well as field visits to conduct individual and focus-group interviews with soldiers, family members, and Army leaders and service providers (Styles, Janofsky, Blankinship, & Bishop, 1988). Work is presently continuing on the conceptual model to ground empirically its theoretical propositions and to translate its proposed concepts and linkages into an empirical model for testing, including the specification of research hypotheses, operational measures of its conceptual subdimensions, and a data analytic strategy. As presently specified, it is best to consider the model as reflecting "progress to date." The model will continue to be refined and specified through subsequent research activities.

The Context

The military community provides a unique opportunity to investigate the interface between work and family role demands, and the influence of this interface on the level of adaptation that service members and their families

make to the military lifestyle. What are these demands? At the organizational level, these demands include long work hours, high stress assignments, required relocations, frequent family separations and reunions, remote tours of duty, long-term separations from extended family and friends, residence in foreign countries, and oftentimes, the subservience of family needs to mission responsibilities (Bowen, 1987a; Hunter, 1982). On the other hand, families at a minimum require an environment that provides them a sense of definition as a unit (Melson, 1983, p. 153). Beyond this boundary specification and identification process, each family will differ in the nature and intensity of role obligations within the family and community (e.g., child care demands and community involvements) as well as the demands of family members for intimacy, time together, communication, flexibility, and solidarity (Melson, 1983).

Service in the Armed Forces involves more than just an occupational choice; it is the selection of a lifestyle which permeates almost every aspect of a person's life. Few civilian occupations require the high level of commitment and dedication from their employees that the military services require. Even fewer ask their employees, much less members of the employee's family, to make the range of personal and family sacrifices to accommodate the work mission. However, military families are distinguished from their civilian counterparts not necessarily by the nature of the demands they face by life in "an occupationally centered, regimented, and hierarchical organization," but rather by the number and pattern of these challenges (Ridenour, 1984; Rodriguez, 1984, p. 51). It is unlikely that there is any other group that confronts so many demands simultaneously (Ridenour, 1984). In a recent analysis, Segal (1986, 1988) used the Cosers' notion of the "greedy" institution (Coser & Coser, 1974) to describe the great demands that the military organization places on the commitment, time, and energy of its service members and their families.

In many ways, the military functions as an "extended family" for service members and their families, giving the military considerable influence over their lives (Ridenour, 1984, p. 4). Informally, the entire family belongs to the military and the status and privileges of the family depend on the rank and status of the member (Lagrone, 1978; Rodriguez, 1984). In return, the military offers job security, rank and status, and benefits which pervade almost every phase of life and which tie service members and their families to the organization both economically and socially. Goffman (1961) used the term "total institutions" to describe organizations that have such an encompassing influence on the lives of its members.

Over the last decade, the Department of the Defense as well as the individual service branches (Army, Air Force, Navy, and Marine Corps) have become increasingly interested in developing personnel policies and support programs which enable military personnel to meet military requirements and still maintain a viable personal and family life (Bowen & Scheirer, 1986; Hunter, 1982; Kaslow & Ridenour, 1984; Kohen, 1984). This expanded interest in family well-being and support stems from a convergence of factors, including greater competition with the civilian sector for a declining manpower pool of new recruits (Bowen, 1986; Faris, 1981; Rimland & Larson, 1981), a substantial increase in the proportion of service members with family

responsibilities (Armed Services YMCA, 1984), and a general societal trend toward revaluing personal and family life (Bowen, 1985; Yankelovich, 1981). It also parallels the expanded recognition by military leadership of the interdependence among quality of life issues, personal and family adaptation, individual readiness and retention, and unit productivity and readiness (Bowen & Scheirer, 1986; Croan, 1985; Vernez & Zellman, 1987).

This heightened recognition has provided the impetus for the development and expansion of administrative and support programs and services for service members and their families (American Family, 1985). For example, since 1980, each service branch, as well as the Department of Defense, has created family liaison offices, and each service has developed formal mechanisms to better coordinate the delivery of support services and programs to service members and their families (Bowen & Scheirer, 1986).

The U.S. Army has assumed important leadership among the services in increasing its support to families. This support has not only included formal recognition of the importance of families to mission accomplishment through the White Paper, 1983: The Army Family (Chief of Staff, Department of the Army, 1983), but also through policy, program, and research initiatives as directed through a series of annual Army Family Action Plans.

Paralleling and supporting the recent upsurge in policy and program initiatives in support of families, there has been a proliferation of research concerning the support needs of service members and their families and an increase in research designed to evaluate the effectiveness of family-oriented policy and program initiatives (Bowen & Scheirer, 1986). For example, there has been a tenfold increase in research on military families alone over the last decade (American Family, 1985). Once again, the U.S. Army has provided important direction and leadership in this expansion of research activity through the U.S. Army Research Institute for the Behavioral and Social Sciences, the Walter Reed Army Institute of Research, and the RAND Arroya Center. Without doubt, the military services have entered a new era of involvement in policy and program planning and development, drawing upon their historical respect for behavioral science research to include research on the development and evaluation of policy and program supports for service members and their families.

The leadership shown by the Department of Defense and the individual service branches in responding to the support needs of service members and their families is noteworthy. However, the initiation of policy and program initiatives for families over the last decade has been largely reactive, developed primarily in response to specific problems and their symptoms (e.g., child and spouse abuse). Moreover, there has been a tendency to homogenize the rich variation and diversity among families in the military in the planning, development, and evaluation of policy and program initiatives on their behalf (Bowen, 1987a; Bowen & Janofsky, 1988). The result has been an "ad hoc" and "piecemeal" approach to policy and program planning and development which has lacked a consistent rationale (Chief of Staff, Department of the Army, 1983), often failing to account for possible variations in the needs, values, and demands of families, and how these, in turn, may vary over the work and family life cycle.

One reason for the "ad hoc" and "piecemeal" approach is the lack of an overarching framework to guide the development and evaluation of policy and program initiatives on behalf of families. There is a critical need for an explicit model that not only identifies the factors which promote the level of family adaptation to the multiplicity of organizational and family demands faced by service members and their families, but also identifies the direct and the indirect impact that military policies, practices, and programs have on the ability of service members and their families to successfully respond to the combination of organizational and family demands. This model must reflect the dynamic and interactive quality of work and family life across the work and family life cycle. In addition, it must respect the tremendous age, ethnic, and cultural diversity found among families in the military services today by accounting for personal system-level influences. Finally, for purposes of clinical and community intervention, the model must be practice-based: capable of guiding the development, implementation, and evaluation of policies, programs and practices in support of families.

The Army Family Adaptation Model

The present research attempts to merge two rich paradigms to provide a broad social-ecological perspective to enhance understanding of the factors and processes which underlie family adaptation to the combination of organizational and family demands. The first of these is the "Double ABC-X" model of family stress and adaptation and its various iterations as advanced by McCubbin and associates (McCubbin & McCubbin, 1987; McCubbin & Patterson, 1983). It has been the predominant perspective in investigating family adaptation within the field of family social science. The second paradigm is the "Person-Environment Fit (P-E)" model of French and associates (French, Caplan, & Harrison, 1982). This perspective and its subsequent refinements occupy a predominant position within the field of organizational psychology in the investigation of individual adaptation in the work arena. Each of these paradigms provides a unique contribution to our conceptualization and understanding of the family adaptation process.

The Double ABCX Model

Grounded in Hill's (1949) ABCX family crisis model which was developed from his research on war induced separations and reunions and informed by Burr's (1973) integration of family stress research, the Double ABCX model (McCubbin & Patterson, 1983) and its latest iteration, the "T-Double ABCX" model (McCubbin & McCubbin, 1987), primarily focuses on how adaptive resources, the family's sense of coherence and perception of their presenting situation, and the pile-up of family stressors buffer and mediate the impact of a family stressor event or transition on the level of family adaptation. In describing the model, McCubbin and McCubbin (1987) state:

> The level of family adaptation (XX) and/or the family's transition back into a crisis situation (or exhaustion) in response to a crisis situation is determined by -- AA the pile-up of demands on or in the family system created by the crisis situation, life cycle changes and unresolved strains --interacting with R the family's level of regenerativity determined in part by the concurrent pile-up of demands--stressors, transitions, and

strains - interacting with T- the family's typology -- resilient, rhythmic, balanced, etc.),-- interacting with BB the family's strengths (the family's adaptive strengths, capabilities and resources) -- interacting with CC the family's appraisal of the situation (the meaning the family attaches to the total situation) and CCC the family's Schema (i.e., world view and sense of coherence which shapes the family's situational appraisal and meaning) -- interacting with BBB the support from friends and the community (social support), interacting with PSC the family's problem solving and coping responses to the total family situation. (McCubbin & McCubbin, 1987, pp. 14-15)

The major contribution of the Double ABCX Model and its latest iteration, the T-Double ABCX Model, to understanding the family adaptation process lies in its broad conceptualization of family adaptation, its strong emphasis on the importance of adaptive resources in the adaptation process, and its application in both the work and family arenas. However, although the model explicitly recognizes the role of cognitive factors in the family adaptation process, especially the family's subjective definition of the event or the presenting situation, these factors have been virtually ignored in empirical tests of the model (Boss, 1987; Walker, 1985). This is especially the case for personal system factors, such as individual values and expectations, and their role in influencing the interpretation of life events and adaptive resources, as well as their role in moderating the influence of stressor events and adaptive resources on the level of family adaptation.

The P-E Fit Model

Traced to the work of Murray (1938) and Lewin (1951), the P-E Fit model has been primarily used in the work arena to examine how the goodness of fit between the characteristics of the job and the related characteristics of the person affect employee behavior, strain, and well-being. In his succinct delineation of the central elements of this model, Caplan (1983) posits two types of person-environment fit. The first of these relates to the level of fit that exists between the needs and values of a person or system and the supplies and opportunities of the environment to meet these needs and values. This component is referred to as the "Needs-Supplies Fit." A second form of fit is referred to as the "Abilities-Demands Fit," relating to the level of fit between environmental demands and the abilities of a person or system to meet these demands. The theory also distinguishes between objective and subjective fit (Caplan, 1987). Objective fit includes only those characteristics about the person and the environment which are not affected by human perception. Subjective fit include those characteristics of the person and the environment as perceived by the person.

Paralleling the paradigm of Lazarus and associates in research on stress and coping (Lazarus & Folkman, 1984), a major strength of the P-E fit model is its explicit recognition of how individual characteristics, such as personal resources, values, and expectations, may moderate the impact of environmental factors on specified outcomes. For example, the impact of work and non-work role demands on family adaptability may depend on the relative salience of these roles for the individual as well as the assumed costs for noncompliance. In fact, measures of fit using a combination of person and environment

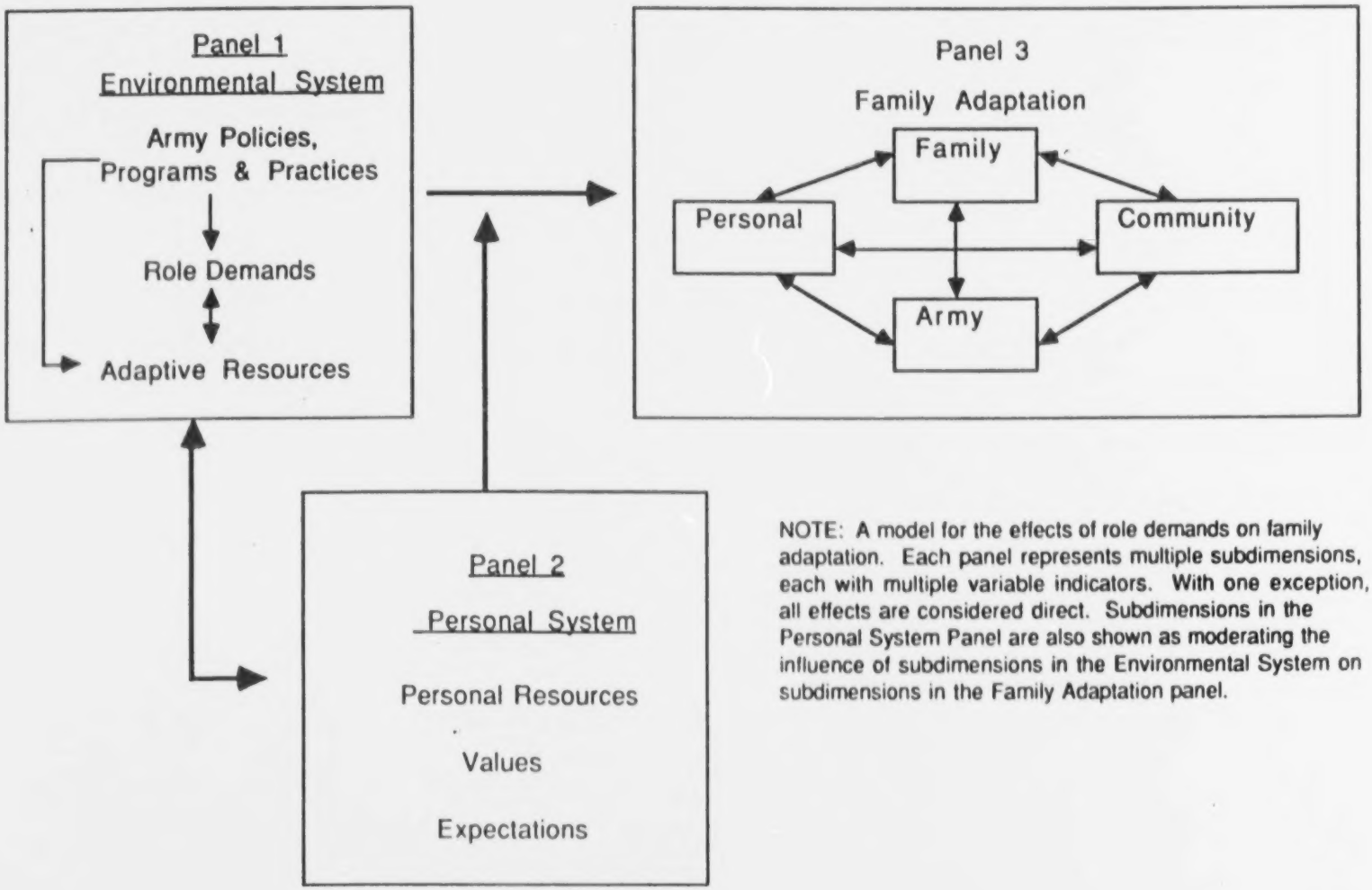
variables have been demonstrated by French and associates (French, Caplan, & Harrison, 1982) to be more predictive of dependent outcomes (e.g., strains) than single, additive measures of person and environment characteristics. In addition, the developers of the model underscore that there may be less than a perfect fit between objective and subjective reality. Both types of variables can be included in models. The major limitation of the P-E fit model is its sheer complexity as well as its operational demands, especially its measurement requirement that person and environment factors be assessed along commensurate dimensions for purposes of assessing their level of congruency and the effects of this congruency on outcome dimensions. In addition, to date, the P-E fit model has been rather narrowly applied to the investigation of occupational stress and organizational effectiveness; little application of this model has been applied to research on family adaptation to a combination of work and family demands.

An Integrative Perspective

Following a schematic presentation of the links between work and non-work factors on individual adaptation by Moos (1986, p. 11), the model shown in Figure 1 attempts to merge the strengths of the Double ABCX model and the Person-Environment Fit model to understand better the variations in the level of family adaptation of service members and their families to the combination of work and family role demands in U.S. Army. A key feature of the model is its conceptualization of the transactional relationship between the person and his or her situation, especially its emphasis on the part that personal resources, values, and expectations play in shaping the meaning, interpretation, and consequences of environmental dynamics for the individual. From this perspective, an understanding of the link between family adaptation and the multiplicity of role demands faced by service members and their families requires a focus on both the person and the environment as interdependent factors (Benner, 1984). Neither an environment perspective alone nor a person perspective alone can fully capture the complexity of adaptation of service members and their families to environmental demands.

The model is divided into three panels of constructs for purposes of presentation: Panel 1--Environmental System; Panel 2--Personal System; and Panel 3--Family Adaptation. It should be emphasized that each panel represents several underlying constructs, each with a class of specific subdimensions that will be presented later in the discussion. As a consequence, each arrow in the figure, both within panels and between panels, represents a number of possible propositions. However, no single construct in the model is necessarily expected to affect all subdimensions associated with a construct or constructs to which it is related in the model, either within panels or between panels. For example, although a direct link is shown between the environmental system and family adaptation, it is not assumed that all features of the environmental system will affect equally all features of family adaptation. In reality, it is likely that specified environmental features will have their strongest effects on more relevant features of family adaptation (e.g., the influence of Army policies, programs and practices should have more direct impact on Army-related outcome dimensions of family adaptation than on personal-related outcomes dimensions of family adaptation).

FIGURE 1
FAMILY ADAPTATION MODEL



NOTE: A model for the effects of role demands on family adaptation. Each panel represents multiple subdimensions, each with multiple variable indicators. With one exception, all effects are considered direct. Subdimensions in the Personal System Panel are also shown as moderating the influence of subdimensions in the Environmental System on subdimensions in the Family Adaptation panel.

In the following discussion, only the more general associations between constructs within panels as well as between panels themselves are highlighted, as diagrammed in Figure 1. More specific propositions derived from the model are outlined in a subsequent section of the report. Although the P-E Fit model explicitly distinguishes between objective and subjective factors, all constructs in the model are conceptualized from the subjective perception of the respondent.

Panel 1 comprises the environmental system, consisting of three sets of factors: (a) Army policies, programs and practices; (b) organizational and family role demands; and (c) adaptive resources which may be available to the family, such as bonds of family unity and community friendships. Both role demands and adaptive resources are depicted in dynamic interaction, and are posited to be influenced directly by Army policies, programs and practices. In addition, the model posits the environmental system (Panel 1) and the personal system (Panel 2) in reciprocal interaction, a transactional perspective that assumes that each system is influenced by changes in the other. The link between the environmental system and family adaptation (Panel 3) is shown as both direct and as moderated by the personal system.

The personal system (Panel 2) also includes three sets of factors: (a) the individual resources of service members (e.g., self-esteem, internal locus of control) (b) individual values, and (c) individual expectations. The personal system is posited to moderate the impact of the environmental system (Panel 1) on family adaptation (Panel 3). Two forms of P-E fit can be conceptualized theoretically from the interaction between the environmental and personal systems: (a) the fit between personal values and expectations and environmental supplies and opportunities, and (b) the fit between personal resources and environmental demands. In the Person-Environment Fit literature, the role of personal system variables are virtually always depicted as moderating the association between environmental system variables and specific outcome dimensions (French & Caplan, 1980; Moos, 1986; Seashore & Taber, 1976). As moderators, these variables may either influence the direction of the relationships between variables in the environmental system and specific outcome dimensions or influence the strength of these relationships.

Family adaptation (Panel 3) is conceptualized broadly from an individual point of view across four conceptual levels: (a) the personal (e.g, subjective well-being), (b) the family (e.g., marital satisfaction), (c) the community (e.g., overall satisfaction), and (d) the Army (e.g., Army-family fit). These four levels of family adaptation are conceptualized in reciprocal interaction, and as both directly and indirectly related to one another.

Although the direction of the relationship between the environmental system and family adaptation is diagrammed as one way, in reality, the relationship is probably reciprocal over time. For example, low levels of family adaptation may initiate coping behaviors that have impact not only on the environmental system, but also on the personal system as well. However, for reasons of clarity and given the difficulty of evaluating such non-recursive relationships statistically with cross-sectional data, they are not explicitly shown in Figure 1. However, the possibility of such additional reciprocal

relationships must be considered in analyzing the ability of the model to capture the complex relationship between role demands and family adaptation, and should be considered in the eventual testing and interpretation of proposed model linkages with cross-sectional data.

Toward Specification and Definition of Constructs

The Environmental System

Army Policies, Programs, and Practices. The changing structure and composition of the Army have created a need for expanded support programs and services, such as child care, recreational services, relocation assistance, job counseling, and family support services. In response, the number of new and expanded support services and programs has increased dramatically over the last five years (Bowen & Scheirer, 1986).

The development and expansion of support mechanisms for families are intended to help Army members and their families better adapt to the demands of military life as well as to promote the quality of family life in the Army. It is often assumed by Army leadership that if families receive the necessary support, they will reciprocate this support in the form of increased support for the member's career; the nature of this relationship between the Army and its families underlies the notion of "partnership" as described in the White Paper, 1983: The Army Family (Chief of Staff, U.S. Army, 1983, p. 10):

> A partnership exists between the Army and Army Families. The Army's unique missions, concept of service and lifestyle of its members--all affect the nature of this partnership. Towards the goal of building a strong partnership, the Army remains committed to assuring adequate support to families to promote wellness; to develop a sense of community; and strengthen the mutually reinforcing bonds between the Army and its families.

In a recent evaluation of Family Support Centers in the U.S. Air Force, Bowen and his associates (Bowen, 1984; Orthner & Pittman, 1986) found that support mechanisms for families in a military community had broad impact on the level of family adaptation to organizational demands as well as on the level of satisfaction of families with military life. These support mechanisms positively influenced families both targeted for intervention as well as those not targeted, and their influence extended to nonusers as well as users of support programs and services. Military policies, practices and programs in support of families were found to have a "symbolic" as well as a "real" influence on family adaptation and satisfaction. In other words, family members often reported that efforts by the organization in support of family life not only provided tangible assistance in coping with the duality of organizational and family demands, but also demonstrated a recognition and concern by the organization for families and family problems which promoted a sense of mutuality and cooperation between the organization and its families.

Bowen and Neenan (1988) recently extended the earlier work of Bowen and associates to examine the relationship between satisfaction with the service's attitude toward families and family problems and satisfaction with the

military way of life among civilian spouses of Army members. Drawing on secondary analysis of the 1985 DoD Survey of Military Spouses, the authors found that the level of satisfaction that spouses reported with the service's attitude toward families and family problems was positively and significantly related to their overall level of satisfaction with the military as a way of life. From the findings, Bowen and Neenan concluded that Army policies and practices that are interpreted by spouses as representing a concern by the institution for families and family problems are likely to contribute toward military-related outcomes based on established linkages among spouse satisfaction with military life, spouse support for the member's career, and member retention and readiness.

Past research which has included the nature of organizational policies, programs, and practices in analytical models has tended to operationalize these aspects of the environmental system by having survey respondents evaluate their knowledge, prior use, and satisfaction with a range of specific policies, programs and practices (Orthner & Bowen, 1982). Although this measurement strategy has produced important evaluative information for descriptive purposes, it has demonstrated limited predictive validity in model testing and development (Orthner et al., 1987). For instance, while the actual presence of, use of, and satisfaction with community supports among service members and their families may be a necessary condition for community satisfaction, their impact upon military and family-related outcomes tends to be indirect and often weak unless the level of these supports are very poor or absent (Orthner et al., 1987). It is recommended that the nature, level and quality of community supports can be best assessed through objective evaluation by community evaluation teams. From this perspective, attention is directed to the actual presence of selective organizational policies, programs and practices in support of service members and their families, their penetration rates in the community, and the quality of service delivery and support as reflected by administrative reviews, user summaries, and reputational indices, including leadership perceptions. Depending on the research objectives, these objective features of the environmental system can then be built into the present model for purposes of hypothesis generation and testing, thus addressing a key feature of the Person-Environment Fit model: its explicit recognition of both objective and subjective aspects of fit, and their interrelationship.

For modeling purposes, the global evaluation by members and spouses of the supportiveness of military policies, programs, and practices at higher headquarters, installation, and unit levels, including leadership support, and their responsiveness to family needs has been more predictive of military- and family-related outcomes than their actual knowledge of, use of, or satisfaction with specific policies, programs and practices (Bowen & Neenan, 1988; Orthner et al., 1987; Orthner & Pittman, 1986). While related to the actual presence and quality of community support mechanisms, these perceptions are more global and their assessment reflects the integration of the values, expectations, and experiences of service members and their families concerning the nature of Army policies, programs and practices in support of families. As a consequence, the present model conceptualizes the nature of Army policies, programs and practices as a construct in the environment system panel based on the subjective perception of the soldier and spouse of their

supportiveness and responsiveness to family needs. An important aspect of this support is the perceptions of service members and their families toward the help-seeking culture in the Army--an aspect of Army policies, programs and practices which has not been carefully examined for its full implications on help-seeking attitudes and behaviors.

Role Demands. As a consequence of the social positions that individuals occupy (e.g, soldier, husband, father), certain characteristic behaviors become expected of these individuals. A product of the larger society, the particular context in which the individual functions, as well as individual definitions of expected behaviors, these more or less integrated sets of expectations that are attached to positional designations are defined as "roles" (Burr, Leigh, Day, & Constantine, 1979, p. 54; Stryker, 1972). While this definition of "role" refers to expectations for social behavior, the use of the term is not consistently defined in the literature. Some investigators have preferred to define "roles" as characteristic patterns of behavior of individuals in positions or statuses (Biddle, 1986; Burt, 1982; Linton, 1936). However, in agreement with Burr et al. (1979), this behavior-based definition of "roles" is better conceptualized by other terms that have emerged in role theory literature, including role performance and role enactment.

Based on the above definition of roles, role demands are conceptualized as the sum total of expectations for behavior which is linked to occupying specific social positions within life domains, including the perceptions of individuals toward the level of time and effort required to meet these expectations (i.e., intensity) as well as the level of compatibility and conflict between them (i.e., spill-over). These role demands are conceptualized as interdependent (Davidson & Cooper, 1981; Greenhaus & Beutell, 1985; Voydanoff, 1987), ranging from very demanding to not demanding, from little interference across roles and role sets to a high amount of interference across roles and role sets (Pleck, 1977). For purposes of the present research, the level and interference of role demands are investigated in three broad life domains which involve multiple positional designations: work, family, and community.

As contrasted to an expansion approach to human energy (Marks, 1977), it is assumed that individuals have a finite amount of time and energy available to meet role demands (Coser & Coser, 1974; Goode, 1960; Merton, 1957). As a consequence, individuals who are faced with excessive role demands or contradictory role demands may not be able to successfully meet expectations for role enactment.

> In such cases . . ., the role pressures associated with membership in one organization are in conflict with pressures stemming from membership in other groups. Demands from role senders on the job for overtime or take-home work may conflict with pressures from one's wife to give attention to family affairs during evening hours. The conflict arises between the role of the focal person as worker and his role as husband and father (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964, p.20).

Such failure or felt difficulty in meeting role demands may lead to negative outcomes for both the individual as well as the family system, including

physical disorder, psychological distress, life dissatisfaction, job dissatisfaction, and marital tension and dissatisfaction (Burr, 1973; Devilbiss & Perrucci, 1982; Fowlkes, 1987; Lewis & Spanier, 1979).

It should be added, however, that the pile-up of role demands per se does not necessarily result in harmful consequences for the individual and/or the family. Individuals are actors as well as reactors (Stryker, 1972; Stryker & Statham, 1983), and may cognitively define and negotiate their roles in such a way to reduce discrepancy between demands and enactment (Thoits, 1987). In addition, related to the expansion approach to human energy, multiple roles and role demands may result in various benefits for the individual and the family that outweigh their costs, including status, security, and resources (Sieber, 1974; Thoits, 1987).

Although the research literature has tended to focus more on the negative consequences of role overload and role conflict, it is also possible for the individual to face too few roles demands. The consequences of such role underload may be particularly detrimental to individual adjustment and adaptation in cases where the role in question is defined by the individual as highly salient and an important part of his or her self identity.

In investigating the level and consequences of role demands among individuals in the family, Hall and Hall (1980) stressed the importance of not only focusing on the role demands of particular individuals in the family, but also on the particular pattern of role demands among individuals in the family. For example, although restricting their attention to the pattern of work and home roles of dual-career couples, they developed a typology of family role structure based on the respective role involvements of husband and wife. Four general role patterns were identified: (a) accommodators, (b) adversaries, (c) allies, and (d) acrobats. These patterns are described in the Table 1 which was adapted from Hall and Hall (1980, p. 246).

In the present research, it will be important to explore the various combinations of role demands faced by individuals as well as the particular pattern of these role demands among family members. The typology by Hall and Hall offers a host of provocative research questions in determining the consequences of role demands on the level of family adaptation, as well as identifying selected factors that may mediate their influence.

Adaptive Resources. Each family system can be conceptualized as not only having its own sources of internal resources for responding to ever present role demands, but also as participating in a larger network of social supports which has its own sources of role demands as well as sources of support. Together, these internal family resources and sources of social support constitute the family's adaptive resources, and are conceptualized to range from low to high, from very supportive to not supportive.

The family system is often regarded as the primary support system for itself, a place where members of the family provide both instrumental and expressive support to one another. The importance of family resources in

Table 1. Role Patterns in Marriage

Type	Work Involvement		Home Involvement	
	Husband	Wife	Husband	Wife
I. Accommodators	High	Low	Low	High
	or		or	
	Low	High	High	Low
2. Adversaries	High	High	Low (but high value for well-ordered home)	Low
3. Allies	Low	Low	High	High
	or		or	
	High	High	Low (with low value for a well-ordered home)	Low
4. Acrobats	High	High	High	High

Note. Adapted from Hall and Hall (1976, p. 246).

promoting family adaptation to stressor events and role demands has been discussed in the family literature since the 1930s. For example, Angell (1936), in attempting to identify those characteristics which promoted family adaptation to the depression of the 1930s identified the importance of family integration (e.g., bonds of affection and unity among family members) and family adaptability (e.g., the flexibility of the family to shifts directions and to reorganize its priorities and course of action). Since the early work of Angell, a number of family theorists and practitioners have called attention to additional family resources which contribute to the family's ability to deal with role demands and crises (Antonovsky, 1987; Antonovsky & Sourani, 1988; Hill, 1949; McCubbin & McCubbin, 1987; Olson & McCubbin, 1983; Stinnett, 1979; Stinnett & DeFrain, 1985). Although these investigations do not necessarily agree upon their outcome criteria for identifying family resources nor on whether family resources have a moderating effect on the relationship between role demands and family adaptation, an indirect effect on family adaptation through their buffering influence on role demands, or a direct effect on family adaptation, Angell's (1936) two dimensions of family integration and family adaptability or related concepts (e.g., cohesion) are common threads that have been identified across these investigations.

Consistent with the work of Stinnett (1979), and other pioneers in research on family resources (McCubbin & McCubbin, 1987; Olson & McCubbin, 1983), family system resources are defined as those relationship patterns and attitudes which are internal to the family system (e.g., adaptability, integration, family coherence), which enable family members to respond confidently and successfully to role demands across life areas, and which promote the adaptation of family members at the individual, family, and

community levels. Mace and Mace (1980) have referred to these patterns and attitudes as the family's "primary coping system."

The concept of social support has increasingly received attention from social scientists and policy-makers interested in its link to individual and family adaptation (Cobb, 1976, 1979; Lin, 1986; McCubbin & McCubbin, 1987; Pilisuk & Parks, 1983; Sandler & Barrera, 1984). However, the nature of the influence of social support on the relationship between role demands and selective outcomes has been contradictory (Benner, 1984). For example, while some investigations have found social support to be indirectly related to outcomes by its buffering impact on role demands, other investigations have found support to either have a moderating influence between role demands and outcomes or a direct effect on outcomes (Pearlin, Lieberman, Menaghan, & Mullan, 1981). In addition, although much attention has been focused on the concept of social support, there is little consistency across research efforts in defining, operationalizing, and measuring its underlying dimensions.

Perhaps the most predominant definition of social support is that adopted by Cobb (1976) who views social support as information a person receives (or possesses) that enables that person to feel that he or she is loved and cared for (i.e., emotional support), esteemed and valued (i.e., esteem support) and belongs to a network that affords an opportunity for mutual obligation and understanding (i.e., network support) (McCubbin & McCubbin, 1987, p. 19). More recently, Lin (1986, p. 17) synthesized various definitions of social support in the literature, including Cobb's definition above, to define social support as "the perceived or actual instrumental and/or expressive provisions provided by the community, social networks, and confiding partners."

According to Lin (1986), the concept of social support has two components: social and support. The social component of social support reflects the family's tie to the social environment at three levels: (a) the community level, (b) the level of social networks, and (c) the level of intimate and confiding relationships. These levels are distinguished largely on the basis of the degree of formality which characterizes the relationship.

The family's sense of belonging to the community, representing its first tie to the social environment, includes the participation of family members in voluntary organizations and their level of identity with the community, or "sense of community." Representing the social integration of the family into the larger community (Lin, 1986), relationships at this level are generally characterized by a mixture of formal and informal linkages and responsibilities.

Social networks, the family's second tie to the social environment, include those persons with whom family members maintain both direct and indirect contact, such as extended family, co-workers, friends, and neighbors. Each member of a family, including children, has a personal network, and collectively, these networks comprise the family's social network (Unger & Powell, 1980).

Before discussing the third level of the family's tie to the social environment, it is important to distinguish between social support systems and

social networks (McCubbin & McCubbin, 1987). A social network refers to all the people with whom family members maintain contact and from whom they potentially receive support (McCubbin & McCubbin, 1987, p. 19). On the other hand, a social support system is that subset of persons within a family's total social network upon whom they rely on for aid in times of need (Thoits, 1982). Consequently, not all members of a social network necessarily provide social support.

The innermost level of the social environment consists of confiding relationships, including intimate relationships with relatives and friends (Lin, 1986). Mutual and reciprocal exchanges are expected in these relationships which are characterized by a high level of trust and interdependency. These relationships are described by Lin (1986) to be governed less by exchange principles and more by a desire to respond to the needs of others. Thus, as close relationships develop, the individuals perceive themselves more as a unit than as a set of exchange parties (Wills, 1985). Based on the work of Lin (1986), it is this third level that has the greatest impact on a family's sense of well-being. Recent evaluations of the Army's Unit Manning System (UMS) by the Walter Reed Army Institute of Research has provided strong evidence of the beneficial effects of small group associations and exchanges on the soldier's and the family's sense of belonging (Martin & Orthner, 1989).

The "support" component of social support reflects the type of support provided to the family. Although many types of support have been identified in the literature, two forms of support are most often distinguished: instrumental and expressive. Based on the work of Cobb (1976; 1979), instrumental support refers to the use of a relationship to achieve a goal or to receive a service, while expressive support refers to emotional support. The provision of instrumental and expressive support to the family by members of the family's social environment can result in the family feeling loved and cared for, esteemed and valued, and a sense of belonging (Cobb, 1976).

Consistent with the definitions of social support by both Cobb (1976) and Lin (1986), social support is nominally defined as the perceived or actual instrumental and/or expressive aid available and/or provided to the family by voluntary and small groups associations within the community, by the family's social network, and by confiding relationships maintained by family members--the family's social environment. Instrumental support is defined as the use of social support to achieve a goal or to receive a service; expressive support is used synonymously to mean emotional support (Lin, 1986).

The Personal System

Personal Resources. The buffering effect of personal resources on family adaptation as well as their moderating effect on the relationship between role demands and family adaptation has increasingly received the attention of researchers in both the military and civilian community (Antonovsky, 1987; Bowen & Janofsky, 1988; Kobasa, 1979; Kobasa, Maddi, & Currington, 1981; Lavee, McCubbin, & Patterson, 1985; McCubbin & Lavee, 1986; McCubbin & McCubbin, 1987). These personal resources have been conceptualized in a number of ways, resulting in the identification of a range of individual

characteristics depending of the perspective of the researcher and the specific purposes of the research. For example, McCubbin and Patterson (1983) described personal resources as a broad range of characteristics which are potentially available to individual family members in handling stressful situations, including psychological, financial, educational, and physical and emotional well-being.

In their classic research, Campbell, Converse, and Rogers (1976, p. 368) also identified a broad array of personal resources which may be available to an individual. Three categories of personal resources and abilities were identified and measured: (a) ascribed resources (e.g., intelligence, physical attractiveness, and health), (b) achieved resources (e.g., education, income), and (c) other current resources (e.g., religiosity, availability of discretionary time).

Compared to McCubbin and Patterson (1983) and Campbell, Converse, and Rogers (1976), Pearlin and Schooler (1978) maintained a more narrow focus on personal resources and abilities, limiting their attention to two psychological resources residing within the self. They defined psychological resources as the personality characteristics that individuals can draw upon "to help them withstand threats posed by events and objects in their environment" (p. 5). These resources, self-esteem and mastery, were hypothesized to reduce the stressful consequences of social strain. Self-esteem was defined as the positiveness of one's attitude toward one's self, and mastery was defined as the extent to which one perceives control over one's life chances, in contrast to being fatalistically ruled.

Somewhat paralleling the emphasis of Pearlin and Schooler (1978) on psychological resources, an interesting concept that has emerged from the work of Kobasa and associates (Kobasa, 1979; Kobasa, Maddi, & Currington, 1981) in investigating personality characteristics and stress is the personality style they label as "hardy." The "hardy" personality exhibits three interrelated personal-level characteristics (Kobasa, 1979, p. 3):

(a) the belief that they can control or influence the events of their experience,

(b) an ability to feel deeply involved in or committed to the activities of their lives, and

(c) the anticipation of change as an exciting challenge to further development.

Kobasa and associates (Kobasa, 1979; Kobasa, Maddi, & Currington, 1981) suggest that a "hardy" personality buffers the individual from stressful life events, serving as a resistant resource.

For purposes of this research, personal resources are defined broadly to include personal attributes and experiences, coping knowledge and skills, as well as psychological resources that individuals bring to their presenting situations. Personal attributes and experiences many include variables such as physical well-being, education level, and command of the English language.

On the other hand, coping knowledge and skills may range from knowing how to obtain medical care to having a valid driving license. Last, based on the earlier work of Pearlin and Schooler (1978) as well as Kobasa and associates, the present research conceptualizes psychological resources on two dimensions: (a) psychological attributes, including self-esteem and internal locus of control, which are defined as relatively stable personality characteristics that individuals can draw upon to buffer the impact of role demands and to facilitate family adaptation, and (b) personal confidence, a more situational indicator of mastery, which reflects one's perceived ability to meet the role demands experienced as a consequence of positional designations within the work, family, and community arena, as well as to influence the nature of one's environment. Although numerous psychological resources have been identified in the literature, the more general constructs of self esteem (Coopersmith, 1967; Lawler, 1973; Rosenberg, 1965), locus of control, (Rotter, 1966), and situational mastery (McCubbin & McCubbin, 1987) are most frequently referenced in the literature, including research with military population groups (Bowen, 1989a; Stawarski, 1987; McCubbin, Patterson, & Lavee, 1983; Szoc, 1982).

Values. It is increasingly recognized in the research literature that individuals and families may vary in their values toward work, family, and community life (Bowen & Janofsky, 1988; Langman, 1987; Wilkinson, 1987). This recognition contrasts greatly with the traditional view in the social sciences of cultural assimilation: the assumption that through socialization agents and processes individuals and families come to share the values of the majority society and its institutions (de Anda, 1984, p. 101). Since the mid-1960s, a number of models have been advanced to explain the continued persistence of variations in the values of individuals despite socialization influences from the majority culture (de Anda, 1984; Rodman, 1963; Valentine, 1971).

Unfortunately, despite growing respect for the diversity of individual and family values, models of individual and family adaptation have not tended to examine how these subjective perceptions may moderate an individual's and family's response to their environment. The P-E Fit Model of French and associates (French, Caplan, & Harrison, 1982) is a notable exception. Although this variable domain within the P-E Fit Model has been used to discuss a number of interrelated constructs (e.g,. motives, needs, values, perceptions, cognitions, and the like) (Caplan, 1987; French, Caplan, & Harrison, 1982; Lawler, 1973; Moos, 1986; Seashore & Taber, 1976), this author prefers the use of the term, "values" (Bowen, 1988b. 1989b).

Although there is no consensus on the definition of values in the literature, values are defined broadly as organized sets of preferences for how individuals wish to conduct their lives (Christensen, 1964; Mindle & Habenstein, 1977; Spiegel, 1982). These preferences are conceptualized as cognitive, serving as a basis for choice and as a guide for action.

In addition, values are assumed to be logically ordered from the most abstract to the most concrete and connected across levels of abstraction (Montgomery, 1982). Although higher-order values are considered to serve as a general frame of reference for the individual (e.g., the importance of family

integration), they are seldom articulated or discussed by individuals. However, they do provide an overarching structure for ordering and evaluating lower-tier values--values which are more open to direct consideration and discussion (e.g., preferences for spending time together as a family) (Montgomery, 1982).

At each level of abstraction, values are conceptualized as hierarchically arranged from most important to least important. It is this property of values which best distinguish them from a closely aligned concept: attitudes (Nye, 1967). All else being equal, individuals are likely to behave in ways that validate their values at the highest level (Friedman, 1987; Montgomery, 1982). Thus, if family demands conflict with work demands and family demands are a priority for the individual, it is predicted that family demands will assume precedence over work demands.

Neither values nor their respective importance for the individual are considered as fixed. They are defined as variables which may change in response to a variety of familial and extra-familial influences, including normative influences in the society.

For purposes of the present research, the investigation of values is restricted to three broad domains: work, family, and community. Based on the work of Bowen & Janofsky (1988), it is assumed that individual values toward role demands in each of these domains (e.g., role salience) as well as toward adaptive resources may vary both between families as well as within families.

Expectations. The construct, "expectations," is most often defined in the literature as an assessment by the individual of what is realistically obtainable regarding a specific goal (Sabatelli, 1988). In the present research, however, expectations are defined more in line with Thibaut and Kelley's (1959) construct of "comparison level of alternatives." For purposes of this report, expectations are defined as an individual's subjective comparative appraisal about the quality of work, family and community life in the Army as compared to their expectations about the quality of work, family, and community life in the civilian sector. The moderating and direct influence of these expectations on the level of family adaptation are assumed to covary with the importance that individuals attach to each aspect of work, family and community life: expectations are assumed to exert their greatest influence on family adaptation in those areas of greatest importance to the individual.

Family Adaptation

The concept of family adaptation has been investigated largely as an outcome of the family's efforts to cope with crisis (McCubbin & Patterson, 1983; McCubbin & McCubbin, 1987). Following the broad specification of family adaptation in the theoretical and empirical work of McCubbin and associates (Lavee & McCubbin, 1985; Lavee, McCubbin, & Patterson, 1985; McCubbin & Lavee, 1986; McCubbin & McCubbin, 1987; McCubbin & Patterson, 1983), as well as the conceptualization of individual adaptation from the Person-Environment Fit theory of French and associates (French, Caplan, & Harrison, 1982; Caplan, 1983), family adaptation is defined as the outcome of

the interplay between the personal and the environment systems. It is viewed as a continuous variable which ranges from high to low, and is conceptualized at four distinct levels: (a) personal, (b) family, (c) community, and (d) Army. The four levels of family adaptation are seen as reciprocal with change in adaptation at one level having consequences for change at the other levels.

Personal. The personal adaptation literature is broad and abounds with confusion. Many terms are used interchangeably (e.g., morale, life satisfaction, well-being, depression, anxiety), and even when constructs are defined independently, they are often highly correlated (Dobson, Powers, Keith, & Goudy, 1979). An additional source of confusion in the literature on personal adaptation lies in the distinction between traits and states. Whereas traits are considered to be relatively permanent characteristics of individuals (Hilgard, Atkinson, & Atkinson, 1975), states are considered more susceptible to situational and organismic influences (Hall & Lindzey, 1978). Despite this important distinction in the literature, the same characteristic (e.g., anxiety) has been considered from both a trait as well as a state perspective (Hall & Lindzey, 1978).

In the present research, personal adaptation is nominally defined across three dimensions: (a) personal well-being, (b) role strain, (c) and life satisfaction. Personal well-being is conceptualized as a positive state manifested by signs of optimism, success, and general contentedness. The second dimension, role strain, is defined based on the classic work of Goode (1960: 483) as the "felt difficulty in fulfilling role obligations." Last, life satisfaction is defined as an individual's assessment of the quality of his or his life (Martin, 1984).

Family. The research on the quality of family relationships dates back to Hamilton's (1929) early research on marital adjustment. Since that time, a number of scholars have attempted to conceptualize and assess the nature of family relationships, especially the marital union. A variety of constructs have been generated in the process, including family life satisfaction, family functioning, family environment, as well as a number of concepts proposed to reflect the nature of the marital and parent-child relationship (Bowen, 1989b). While these constructs all represent "qualitative dimensions and evaluations" of relationships within the family, there is a great deal of ambiguity and overlap in the way these concepts are defined and operationalized (Lewis & Spanier, 1979, p. 269).

For purposes of the present research, family adaptation is defined broadly as the relative balance of satisfactions and tensions within the family system as well as by the level of marital stability. Importantly, this definition encompasses both the balance of satisfactions and tensions in the marital as well as the parent-child relationship.

Community. The definition of community as an outcome has posed difficulty for researchers. The concept itself is multi-level as well as multidimensional, including a large array of both physical and social descriptors (Orthner et al., 1987). Most often, the approach to definition has been to nominally define it based on either its physical or social boundaries or to operationally define it based on a spectrum of specific

community features (e.g., availability of housing, quality of schools, level of crime, support services and programs, informal social supports) which are evaluated across a global measure of satisfaction (Orthner et al., 1987).

Based on the review by Orthner et al. (1987), community is nominally defined according to Edwards and Jones (1976, p. 13):

> Community is a group structure integrated around goals that derive from the people's collective occupation and utilization of habitational space. Members of the community have some degree of collective identification with the occupied space and the community has a degree of local autonomy and responsibility.

Built on this definition, community adaptation is defined in the present report in terms of global satisfaction that individuals have with their community as a place to live and raise a family. Although the specific geographic parameters of community may differ from family to family, community boundaries include at a minimum both the Army installation and the surrounding local civilian community where service members and their families work and live.

Army. The viability of the family system is dependent upon its fit with other systems in its social environment with which it interfaces (Melson, 1983). For the Army family, the military system is a major, if not the major, system in its environment. Family adaptation to Army life is a concept which describes the health of this interface. A great deal of research suggests that a positive family attitude toward the military system bolsters family adaptation (Bowen, 1988a; Bower, 1967; Gonzalez, 1970; McCubbin, Patterson, & Lavee, 1983; Orthner & Bowen, 1982; Pederson & Sullivan, 1964; Szoc, 1982)

For purposes of this research, adaptation to Army life concerns the overall orientation of family members to life in the Army and their commitment to its values and lifestyle. Perhaps best captured by the notion of "Fit" (Bowen, 1987a; McCubbin, Patterson, & Lavee, 1983; Melson, 1983; Szoc, 1982), it refers to the sense of mutual support, adaptation, commitment, and shared purpose that service members and their families feel with the Army institution; their support of the Army member's job and career; their commitment to Army organizational mission, goals, values and lifestyle; and the degree to which they believe the Army environment is a good environment for marriage and to raise children.

Propositions from this Model

As noted above, there are a number of specific propositions that may be derived from the model diagrammed in Figure 1. The number of possible propositions increases exponentially when the conditioning influence of personal system constructs are considered as moderating the relationship between environmental system and family adaptation constructs. Since each construct in Figure 1 represents multiple subdimensions as well as variable indicators, each proposition will result in the eventual specification of multiple hypotheses for empirical testing. The more specific propositions that can be derived from the model are listed below. An asterisk follows

those propositions that have the greatest immediate impact of supporting the Army Family Action Plans through research products that will provide a basis for developing pilot programs to improve family adaptation in Army life.

Although theoretically based on the work of McCubbin and associates (Lavee, McCubbin, & Patterson, 1985; McCubbin & McCubbin, 1987; McCubbin & Patterson, 1983) and French and associates (French, Caplan, & Harrison, 1982), the direction and shape of the proposed relationships are logically deduced, but not necessarily empirically grounded. Work is presently being conducted to ground each proposition in the empirical literature. As a consequence, caution is advised in the use of these propositions as support for policy, program or practice initiatives; they are offered only for heuristic purposes.

a. The positive appraisal of Army policies, programs and practices influences the perception of the intensity and spill-over of role demands, and this is an asymptotic relationship (-/0): the amount of influence increases inversely and then stabilizes.

b. The positive appraisal of Army policies, programs and practices influences the level and interaction of adaptive resources, and this is a positive, monotonic relationship.

c. The intensity and spill-over of role demands influences the level and interaction of adaptive resources, and this is an asymptotic relationship (0/+): the amount of influence is stable and then increases.

d. The level and interaction of adaptive resources influence the intensity and spill-over of role demands, and this is a curvilinear relationship (-/0/+): role demands are the highest at low and high levels of adaptive resources.

e. The positive appraisal of Army policies, programs and practices influences the comparative expectations about life in the Army, and this is a positive, monotonic relationship.

f. The intensity and spill-over of role demands influence the comparative expectations about life in the Army, and this is a negative, monotonic relationship.

g. The level and interaction of adaptive resources influences the comparative expectations about life in the Army, and this is a positive, monotonic relationship.

h. The level and interaction of personal resources influences the intensity and spill-over of role demands, and this is an inverse, monotonic relationship.

i. There is a positive and reciprocal relationship between the level and interaction of personal resources and the level and interaction of adaptive resources.

j. The salience of roles as reflected by values influences perceptions toward the intensity and spill-over of role demands, and this is an inverse, monotonic relationship.

k. The salience of adaptive resources as reflected by values influences the level and interaction of adaptive resources, and this is a positive, monotonic relationship.

l. There is a reciprocal and positive interaction among the components of family adaptation: personal, family, community and Army.*

m. The positive appraisal of Army policies, programs and practices influences the level of family adaptation, and this is a positive, monotonic relationship.*

n. The intensity and spill-over of role demands influences the level of family adaptation, and this is curvilinear relationship (+/0/-): family adaptation is the lowest at high and low levels of role demands.*

o. The level and interaction of adaptive resources influence the level of family adaptation, and this is a positive, monotonic relationship.*

p. The level and interaction of personal resources influence the strength of the relationship between the intensity and spill-over of role demands and level of family adaptation: Increases in personal resources will decrease the strength of the relationship; decreases in personal resources will increase the strength of the relationship.*

q. The level and interaction of personal resources influence the strength of the relationship between the level and interaction of adaptive resources and family adaptation: Increases in personal resources will decrease the strength of the relationship; decreases in personal resources will increase the strength of the relationship.*

r. The salience of role demands as reflected by values influences the nature of the relationship between the intensity and spill-over of role demands and family adaptation: When salience is low, increases in role demands will have an asymptotic relationship to family adaptation (0/-); when salience is high, increase in role demands will have an asymptotic relationship to family adaptation (0/+).

s. The salience of adaptive resources as reflected by values influences the strength of the relationship between the level and interaction of adaptive resources and family adaptation: When salience is low, the strength of the relationship decreases; when salience is high, the strength of the relationship increases.

t. The comparative appraisal about life in the Army influences the strength of the relationship between the appraisal of Army policies, programs and practices and family adaptation: When comparative appraisal about life in the Army is favorable, the strength of the relationship increases; when

comparative appraisal about life in the Army is unfavorable, the strength of the relationship decreases.

u. The comparative appraisal about life in the Army influences the strength of the relationship between the intensity and spill-over of role demands and family adaptation. When comparative appraisal about life in the Army is favorable, the strength of the relationship decreases; when comparative appraisal about life in the Army is unfavorable, the strength of the relationship increases.

v. The comparative appraisal about life in the Army influences the strength of the relationship between the level and interaction of adaptive resources and family adaptation. When comparative appraisal about life in the Army is favorable, the strength of the relationship increases; when comparative appraisal about life in the Army is unfavorable, the strength of the relationship decreases.

A Life Course Perspective

Families change greatly over time in their membership, function, and needs. Work careers have a similar dynamic and also change in the nature and level of their demands over time (Moen, 1983, p. 417). As a consequence, to understand variations in the work and family demands of individuals, the influence of personal resources and the use of family and community resources by individuals to coordinate and meet these demands, and the implications of these demands on the level of family adaptation, it is necessary to employ a process model of work and family connections. Voydanoff (1980, p. 1) has found it productive to apply a "life-course perspective" and "role strain theory" to the analysis of work and family dynamics over the life cycle. The following discussion of the analysis of work and family dynamics over the life course draws heavily upon the work of Voydanoff (1980, 1987).

The concept of work and family "career" is essential to understanding variations in the nature and consequences of work and family demands over time. The notion of "career" as applied to work and family refers to "a patterned sequence of activities" throughout the life cycle (Voydanoff, 1980, p. 1), and includes stages and critical transition points (Aldous, 1978; Feldman & Feldman, 1975). Stages are divisions within the career (or life cycle) that are different enough from one another to constitute separate periods (e.g., singlehood, marriage) (Aldous, 1978). From the process or life-course perspective, attention is focused on the interactions of work and family career lines across time. At any one point in the life cycle, individuals can be located at certain intersections of these career lines that may involve competing demands that necessitate coordination and management (Voydanoff, 1980, p. 1). Variations in the demands that result from the interactions of work and family demands may create role overload and spill-over for the individual which may negatively impact upon both work and family performance and stability (Voydanoff, 1980, 1987).

To date, little theoretical or empirical attention has been directed toward examining the intersections of work and family demands over the life cycle in either the military or the civilian sector. Research is required in the Army

community that traces work and family dynamics over time, exploring the consequences of this interaction for soldiers as well as for members of their families. It is likely that there are pressure points at certain intersections of work and family careers (Voydanoff, 1980, 1987). For example, many individuals attempt to initiate their careers and to start their families simultaneously. The combined responsibilities for meeting the developmental needs of young children together with the pace, high demands, and often inflexibility of a beginning career may confront young adults and their families with considerable role demands and pressure. Such pressures may be compounded in situations where both the husband and the wife are pursuing work careers.

The Rapoports (1977) refer to the intermeshing of work and family careers as "role cycling." The intersections of work and family career lines over the life cycle present a unique vantage point for investigating the consequences of transitions in either the work career, the family career, or both on the nature of role demands and their influence on the family system and its adaptation.

Stages in the Family Life Cycle

Introduction of the family life cycle (FLC) construct as a descriptive and heuristic tool for describing and comparing families at different points in the life cycle began in the 1930s (Norton, 1983). Since that time, family researchers have used various schemes and numbers of stages to describe the major stages and points of transition in the life course of the family (e.g., Aldous, 1978; Duvall, 1977; Hill, 1964; Murphy & Staples, 1979; Rogers, 1962; Sorokin, Zimmerman, & Galphin, 1931). Most often, these classification schemes have identified stages organized around specific events and developmental tasks in the family (e.g., marriage, birth of first child, retirement) (Spanier, Sauer, & Larzelere, 1979, p. 27). Of these classification schemes, Duvall's (1977) eight stage classification system has been probably the most extensively referenced in the literature. Her categories include the following:

(a) beginning families: married couples who are childless;

(b) child-bearing families: oldest child between birth and 30 months;

(c) families with preschool children: oldest child is two and a half to six years of age;

(d) families where the oldest child is between six and 12 years of age;

(e) families in which the oldest child is in the teens;

(f) families as launching centers: children are leaving home;

(g) families in the middle years: between the launching period and retirement; and

(h) aging families: retirement to death.

Despite the popularity of the family life cycle concept among family researchers (Spanier, Sauer, & Larzelere, 1979), recent demographic shifts in patterns of marriage formation, procreation, and marital dissolution have challenged the validity of the FLC concept as traditionally defined for use in description and empirical analysis (Glick, 1984; Norton, 1983). Recent conceptual efforts have attempted to incorporate more contemporary family patterns into the FLC construct, such as divorce, remarriage, and single parenthood (e.g., Mattessich & Hill, 1987; Murphy & Staples, 1979; Nock, 1979; Uhlenberg, 1974).

Although considerable research has been conducted in the civilian sector that examines how family-related role demands, adaptive resources, and satisfactions vary over the FLC, comparably less attention has focused on these relationships in the military. A notable exception is the work of McCubbin and associates (McCubbin & Lavee, 1986; McCubbin, Patterson, & Lavee, 1983) whose research suggests that family demands, resources and adaptation vary greatly over the life cycle of the family. In addition, little research has been conducted in either the civilian or military sector exploring how work-related demands, adaptive resources, and satisfactions vary across the FLC.

Research that has been conducted suggests that family role demands and satisfaction follow a curvilinear path over the life cycle: role demands are highest and family life satisfaction is the lowest during the period when young children are in the household. In comparison, role demands are lower and family life satisfaction is higher among childless couples and among those couples whose children have begun to depart or who have departed from the home (Mattéssich & Hill, 1987). On the other hand, research concerning variations in work demands and satisfactions over the life cycle is less definitive. For example, Wilensky (1961) reported that job satisfaction tended to decline with the birth and rearing of children. However, more recent research by Osherson and Dill (1983) and Crouter (1984) fail to find support for the influence of family life cycle dynamics in either the spill-over of work and family demands or variations in job satisfaction.

Stages in the Work Career

Work careers share a similar dynamic as family careers and change and evolve in a more or less ordered and predictable manner over the life course (Moen, 1983; Voydanoff, 1980, 1987). Although work careers have been defined in broad terms such as general patterns of work experience across time (e.g., Kanter, 1977), Wilensky (1961) is more restrictive in his definition, referring to "a succession of related jobs, arranged in a hierarchy of prestige through which persons move in an ordered sequence" (p. 523).

Consistent with Wilensky's more restricted definition of work career, Bailyn and Schein (1976) identified six stages of career transition, each distinguished by developmental tasks (cited in Voydanoff, 1987, pp. 86-87):

(a) Preparation: process of choosing and preparing for the career;

(b) Novitiate: period of learning and socialization in which the entrant is assessed in terms of long-range potential;

(c) Early career: person is fully functioning and doing meaningful though rarely crucial work; further learning and trial;

(d) Middle career: person has been fully accepted into career status and is expected to enter a period of maximum productivity and performance;

(e) Late career: a person is past the point of maximum productivity though experience allows a high level of contribution and effective teaching of younger people; and

(f) Post exit: person is no longer officially a member of the occupation but may serve as a consultant or part-time employee.

Although it is likely that these stages vary in their length and dynamics across different occupations, the general sequence of career progression would appear to be similar across different types of careers (Voydanoff, 1987, p. 87), including military careers with some modifications. For example, with the possible exception of the first and the last stage, it is possible to link these career stages to the age and tenure of employees in the organization and their occupational levels or grades, including the use of pay grade within the enlisted and officer ranks in the military services.

The empirical literature suggests an important link between career stage and the nature of role demands and the level of satisfaction in the work arena (Bailyn & Schein, 1976; Levinson, 1978; Orthner & Bowen, 1982). However, researchers have generally neglected the relationship between stages in the work career and other career lines, such as the family. Since work and family have been traditionally viewed as complementary life domains divided by lines of gender, researchers have tended to study the dynamics and influences of the work career as separate from the dynamics and influences of the family career (Kanter, 1977).

The Intersection of Work and Family Careers

Historically, little variation was assumed in the timing of work and family events, at least among men. According to Osherson and Dill (1983, p. 339), men typically initiated their careers, married a woman who did not work outside the home, began their families by their mid-twenties, and achieved some degree of career success and financial security by the mid-forties. Because little variation was assumed in the general life pattern, the influence of family variables on the career development and outcomes for men was seldom examined. Today, the once predictable life course sequence of work and family patterns and demands for men and women vary greatly (e.g., marriage and parenthood are often delayed, career changes are made, and individuals elect to either retire early or never retire) (Osherson & Dill, 1983). Through their demographic analysis, Masnick and Bane (1980)

graphically show that men and women are increasingly following varied and nontraditional work and family career trajectories.

Voydanoff (1980, 1987) uses the concept of "work-family life cycle" to refer to the combined stages of work and family careers over the life course. According to Voydanoff (1980, p. 3), men and women who are engaged in work and family careers move through the stages of both careers in a parallel fashion, responding to the respective demands of both roles. As a consequence, at any given time, an individual can be located at a particular intersection of work and family career stages.

As noted previously, at certain intersections in work and family careers, individuals may be especially likely to experience frustration in meeting the demands from work and family roles (Hofferth & Moore, 1979; Moen, 1983; Piotrkowski, Rapoport, & Rapoport, 1987). Voydanoff (1980, 1987) states that the demands from multiple roles can be examined in terms of role accumulation, defined as the "total number of roles" performed by an individual (Burr, Leigh, Day, & Constantine, 1979). Over the course of the life cycle, most adults perform roles associated with occupying the positions of workers, parents, and spouses (Crosby, 1987; Voydanoff, 1987). When the combined demands of work and family roles become too taxing on the time and energy of the individual, both role overload (i.e., a situation where the totality of demands is too great) and role spill-over (i.e., a situation where the demands from one role create interference in the performance of other roles) can be experienced (Voydanoff, 1980, 1987). In many cases, role overload and role spill-over can significantly interfere with the ability of the individual to meet role demands and responsibilities (Burr, 1973; Goode, 1960; Voydanoff, 1980, 1987). In such situations, the role performance of the individual can be seriously compromised and the level of family adaptation may be reduced.

For purposes of the present research, it is proposed that dimensions within the environment system, the personal system, as well as dimensions of family adaptation may vary considerably over the work and family life cycle. As a consequence, based on a broad conceptualization of the family life cycle and a more narrow range of career stages than outlined by Bailyn and Schein (1976), a sample typology of work-family life cycles is outlined for purposes of operationalization and measurement. This typology is based upon the integration by Voydanoff (1987, pp. 88-91) of the work and family life cycle. Figure 2 presents a preliminary overview of the combined work and family life cycle typology.

Conclusion

All individuals face role demands in their daily life which result from occupying social positions (e.g., worker, spouse, parent) within life domains. Some of these life domains are recognized by social scientists as greedier than others, such as the encompassing demands that military service makes upon service members and their families (Segal, 1986). A key question that has challenged social scientists in the military community has been to identify the factors which distinguish individuals and families who are able to meet role demands with confidence, to successfully perform required roles, to

FIGURE 2
SAMPLE TYPOLOGY OF WORK-FAMILY LIFE CYCLE CONCEPT*

FAMILY LIFE CYCLE

WORK CAREER	Childless	Youngest Child 0-5	Youngest Child 6-11	Youngest Child 12-18	Postparental
Early Career E1-E4/01-02					
Middle Career E5-E6/03-04					
Late Career E7-E9/05+					

*For presentation purposes only.

experience manageable levels of role strain and conflict, and to successfully adapt to rigors of the military lifestyle through positive response to the confluence of role demands.

This report advances a conceptual model for identifying those factors which buffer and moderate role demands and their consequences at the personal, family, community, and Army levels of analysis. It theoretically grounds the research on role demands and their link to family adaptation, discusses and nominally defines conceptual domains and subdimensions in the model, and specifies a number of propositions which are derived from the model for empirical grounding, specification, and testing. The overall aim is to advance a conceptual model of family adaptation which provides a framework for the identification, definition, and eventual operationalization and measurement of conceptual domains for addressing the role of family factors in retention, readiness, and sense of community. Such conceptual clarification and modeling are precursor steps to the empirical specification of testable models, rich with operational measures and testable research hypotheses which are responsive to project objectives. It is a critical first step in theory development and in the design of intervention strategies (Shehan, 1985).

As a precursor step, the proposed model provides important structure for directing the next phase of project activities, especially the design of the survey instruments for the field investigation. However, it is necessary to note that models themselves are always in process, continually being refined and updated based upon theoretical and empirical discoveries and developments--both an inductive as well as a deductive process. As a consequence, the model proposed should be viewed merely as a working framework. It undoubtably will be refined and updated as work on the project continues. With this in mind, several key activities are essential at this point.

First, a decision must be made concerning which conceptual domains and subdimensions require empirical specification. Given project objectives and the inherent constraints in the construction of the survey instruments (e.g., length and time parameters), it is important to prioritize the relative importance of each conceptual domain and their respective subdimensions for purposes of empirical measurement. This decision must be made based on overall project objectives, and the utility of proposed conceptual subdimensions and paths in the model for guiding intervention strategies in support of Army service members and their families--a predictive rather than an explanatory model development and testing strategy.

Second, a number of propositions have been logically derived based upon a theoretically deductive process for heuristic purposes only. However, the proposed direction and shape of these relationships between and among subdimensions in the model require empirical justification. Of course, it is logical and more efficacious to complete this step only after a decision is made about the priority of concepts and subdimensions in the model--presently a nonrecursive activity among project representatives being made on the basis of theoretical, empirical, and practical grounds. With this process in mind, it is essential that propositions which are retained for further investigation

be empirically grounded for purposes of deriving an empirically testable model, replete with operational variables and hypotheses.

Third, it is recommended that a plan be developed for analyzing the data that will result from the field survey. The model proposed yields a number of propositions, some of which are specified as nonlinear and with conditioning or moderating effects. These complexities require a carefully orchestrated data analysis plan, including preferred statistical tests and levels of significance appropriate for large sample sizes and weighed data. It also requires that decisions be made about the unit of analysis (e.g, individual or couple), control variables in the analysis (e.g., race/ethnic group; gender) and whether the total sample will be used in the analysis or stratified for purposes of analysis (e.g., officer, enlisted). Of course, these decisions depend upon the objectives of the data analysis.

References

Aldous, J. (1978). Family careers: Developmental change in families. New York: John Wiley and Sons.

American Family. (1985, April). Military family services and research on the rise. American Family, 2-7.

Angell, R. C. (1936). The family encounters the depression. New York: Scribner.

Antonovsky, A. (1987). Unraveling the mystery of health. San Francisco, CA: Jossey-Bass, Inc.

Antonovsky, A., & Sourani, T. (1988). Family sense of coherence and family adaptation. Journal of Marriage and the Family, 50, 79-92.

Armed Services YMCA. (1984). American military families: Basic demographics. Springfield, VA: Military Family Resource Center.

Bailyn, L., & Schein, E. (1976). Life cycle considerations as indicators of quality of employment. In A. D. Biderman & T. F. Drury (Eds.), Measuring work quality for social reporting (pp. 151-168). Beverly Hills, CA: Sage Publications.

Benner, P. E. (1984). Stress and satisfaction on the job: Work meanings and coping of mid-career men. New York: Praeger.

Biddle, B. J. (1986). Recent developments in role theory. Annual Review of Sociology, 12, 67-92.

Boss, P. (1987). Family stress. In M. B. Sussan & S. K. Steirmetz (Eds.), Handbook of marriage and the family (pp. 695-723). New York: Plenum Press.

Bowen, G. L. (1984). Evaluation of U.S. Air Force family support centers. Evaluation and Program Planning, 7, 303-310.

Bowen, G. L. (1985). Families-in-blue: Insights from Air Force families. Social Casework, 66, 459-466.

Bowen, G. L. (1986). Intergenerational occupational inheritance in the military: A reexamination. Adolescence, 21, 623-629.

Bowen, G. L. (1987a). An ecosystem model of work and family in the U.S. Military. In H. G. Lingren & G. Rowe (Eds.), Family strengths 8-9: Pathways to well-being (pp. 15-26). Lincoln: University of Nebraska Press.

Bowen, G. L. (1987b). Family life satisfaction: Toward definition and measurement (Unpublished manuscript). Chapel Hil', NC: University of North Carolina at Chapel Hill.

Bowen, G. L. (1987c). Family strength: The central model link (Unpublished manuscript). Chapel Hill, NC: University of North Carolina at Chapel Hill.

Bowen, G. L. (1987d). Identification of strong/well families and the mechanisms to support them (Contract No. MDA903-87-C-0540). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Bowen, G. L. (1988a). The relationship of satisfaction with the environment for families and satisfaction with the military way of life among soldiers: A secondary analysis (Contract No. MDA903-87-C-0540). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Bowen, G. L. (1988b). The value-behavior congruency model of family life satisfaction: Implications for clinical practice. Family Therapy, 15, 7-21.

Bowen, G. L. (1989a). Family adaptation to relocation: An empirical analysis of family stressors, family resources, and sense of coherence (Technical Report 856). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A212 805)

Bowen, G. L. (1989b). Toward conceptual refinement of operational outcome variables: The case of family life satisfaction. In G. L. Bowen & D. K. Orthner (Eds.), The organization family: Work and family linkages in the U.S. military (pp. 143-162). New York: Praeger.

Bowen, G. L., & Janofsky, B. J. (1988). Family strengths and adaptation to Army life. Washington, DC: Department of the Army, Office of the Chief of Chaplains.

Bowen, G. L., & Neenan, P. A. (1988). Organizational attitude toward families and satisfaction with the military as a way of life: Perceptions of civilian spouses of U.S. Army members (Contract No. MDA903-87-C-0540). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Bowen, G. L., & Scheirer, M. A. (1986). The development and evaluation of human service programs in the military: An introduction and overview. Evaluation and Program Planning, 9, 193-198.

Bower, E. (1967). American children and families in overseas communities. American Journal of Orthopsychiatry, 37, 787-796.

Burr, W. R. (1973). Theory construction and the sociology of the family. New York: John Wiley & Sons.

Burr, W. R., Leigh, G. K., Day, R. D., & Constantine, J. (1979). Symbolic interaction and the family. In W. R. Burr, R. Hill, F. I. Nye, & I. L. Reiss (Eds.), Contemporary theories about the family (Vol 2) (pp. 42-111). New York: The Free Press.

Burt, R. S. (1982). Toward a structural theory of action: Network models of social structure, perception, and action. New York: Academic.

Campbell, A., Converse, P. E., & Rogers, W. L. (1976). The quality of life: Perceptions, evaluations and satisfactions. New York: Russell Sage Foundation.

Caplan, R. D. (1983). Person-environment fit: Past, present, and future. In C. L. Cooper (Ed.), Stress research. New York: Wiley.

Caplan, R. D. (1987). Person-environment fit in organizations: Theories, facts, and values. In A. W. Riley & S. J. Zaccaro (Eds.), Occupational stress and organizational effectiveness (pp. 103-140). New York: Praeger.

Chief of Staff, U.S. Army. (1983). White paper, 1983: The Army family. Washington, DC: Department of the Army,

Christensen, H. T. (1964). The intrusion of values. In H. T. Christensen (Ed.), Handbook of Marriage and the Family (pp. 969-1006). Chicago: Rand McNally & Co.

Cobb, S. (1976). Social support as a moderator of life stress. Psychosomatic Medicine, 38, 300-314.

Cobb, S. (1979). Social support and health through the life course. In M. W. Riley (Ed.), Aging from birth to death. Boulder, CO: Westview Press.

Coopersmith, S. (1967). The antecedents of self-esteem. San Francisco: Freeman.

Coser, L. A., & Coser, R. L. (1974). The housewife and her 'greedy family.' In L. A. Coser (Ed.), Greedy institutions (pp. 89-100). New York: Free Press.

Croan, G. M., Bowen, G. L, Farkas, G., Glickman. A., Orthner, D., Nogami, G., Gade, P. A., & Tremble, T. (1987). Career decision making and the military family: Towards a comprehensive model (Contract No. DAAG-29-81-0-0100 DO 1684). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Crosby, F. J. (1987). Spouse, parent, worker. New Haven: Yale University Press.

Crouter, A. C. (1984). Spillover from family to work: The neglected side of the work-family interface. Human Relations, 37, 425-442.

Davidson, M. J., & Cooper, C. L. (1981). A model of occupational stress. Journal of Occupational Medicine, 23, 564-574.

de Anda, D. (1984). Bicultural socialization: Factors affecting the minority experience. Social Work, 29, 101-107.

DeJong, J. (1987a). Family stressors (Unpublished manuscript). Fairfax, VA: Caliber Associates.

DeJong, J. (1987b). Army/family fit (Unpublished manuscript). Fairfax, VA: Caliber Associates.

Devilbiss, M. C., & Perrucci, C. C. (1982). Effects of role multiplicity on U.S. Army personnel. Journal of Political and Military Sociology, 10, 1-13.

Dobson, C., Powers, E. A., Keith, P. M., & Goudy, W. J. (1979). Anomia, self-esteem, and life satisfaction: Interrelationships among three scales of well-being. Journal of Gerontology, 34, 569-572.

Duvall, E. M. (1977). Family development (5th ed.). Philadelphia: Lippincott.

Edwards, A. D., & Jones, D. G. (1976). Community and community development. The Hague: Mouton.

Faris, J. H. (1981). The all-volunteer force: Recruitment from military families. Armed Forces and Society, 7, 545-559.

Feldman, H., & Feldman, M. (1975). The family life cycle: Some suggestions for recycling. Journal of Marriage and the Family, 37, 277-284.

Fowlkes, M. R. (1987). Role combinations and role conflict: Introductory perspective. In F. J. Crosby (Ed.), Spouse, parent, worker (pp. 3-10). New Haven: Yale University Press.

French, J. R. P., Jr., & Caplan, R. D. (1980). Organizational stress and individual strain. In J. D. Adams (Ed.), Understanding and managing stress: A book of readings (pp. 45-84). San Diego, CA: University Associates, Inc.

French, J. R. P., Jr., Caplan, R. D., & Harrison, R. V. (1982). The mechanisms of job stress and strain. Chichester, England: John Wiley & Sons.

Friedman, D. (1987). Notes on "toward a theory of value in social exchange." In K. S. Cook (Ed.), Social exchange theory (pp. 47-58). Newbury Park, CA: Sage Publications.

Glick, P. C. (1984). Marriage, divorce, and living arrangements: Prospective changes. Journal of Family Issues, 5, 7-26.

Goffman, E. (1961). Asylums (1st ed.). Chicago: Aldine Publishing Company.

Gonzalez, V. (1970). Psychiatry and the Army brat. Chicago: C. C. Thomas.

Goode, W. J. (1960). A theory of role strain. American Sociological Review, 25, 483-496.

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. In B. C. Miller & D. H. Olson (Eds.), Family studies: Review yearbook (3rd ed.) (pp. 299-319). Beverly Hills, CA: Sage.

Hall, C. S., & Lindzey, G. (1978). Theories of personality. New York: Wiley & Sons.

Hall, D. T., & Hall, F. S. (1980). Stress and the two-career couple. In C. L. Cooper & R. Payne (Eds.), Current concerns in occupational stress (pp. 243-266). Chichester, England: John Wiley & Sons.

Hamilton, G. (1929). A research in marriage. New York: Boni.

Hilgard, E. R., Atkinson, R. C., & Atkinson, R. L. (1975). Introduction to psychology. New York: Harcourt Brace Jovanovich.

Hill, R. (1949). Families under stress. New York: Harper & Row.

Hill, R. (1964). Methodological issues in family development research. Family Process, 3, 186-206.

Hofferth, S. L., & Moore, K. A. (1979). Women's employment and marriage. In R. E. Smith (Ed.), The subtle revolution (pp. 99-124). Washington, DC: The Urban Institute.

Hunter, E. J. (1982). Families under the flag. New York: Praeger.

Kahn, R. L., Wolfe, D. M., Quinn, R., Snoek, J. D., & Rosenthal, R. A. (1964). Organizational stress. New York: John Wiley.

Kanter, R. M. (1977). Work and family in the United States: A critical review and agenda for research and policy. New York: Russell Sage Foundation.

Kaslow, F. W., & Ridenour, R. I. (Eds.). (1984). The military family. New York: The Guilford Press.

Kobasa, S. (1979). Stressful life events, personality, and health: An inquiry into hardiness. Journal of Personality and Social Psychology, 37, 1-11.

Kobasa, S., Maddi, S. R., & Courington, S. (1981). Personality and constitution as mediators in the stress-illness relationship. Journal of Health and Social Behavior, 22, 368-378.

Kohen, J. A. (1984). The military career is a family affair. Journal of Family Issues, 5, 401-418.

Lagrone, D. M. (1978). The military family syndrome. American Journal of Psychiatry, 135, 1040-1044.

Langman, L. (1987). Social stratification. In M. B. Sussman & S. K. Steinmetz (Eds.), Handbook of marriage and the family (pp. 211-249). New York: Plenum Press.

Lavee, Y., & McCubbin, H. I. (1985, November). Adaptation in family stress theory: Theoretical and methodological considerations. Paper presented at the Theory Construction and Research Methodology Workshop, National Council on Family Relations, Dallas, TX.

Lavee, Y., McCubbin, H. I., & Patterson, J. M. (1985). The Double ABCX Model of family stress and adaptation: An empirical test by analysis of structural equations with latent variables. Journal of Marriage and the Family, 47, 811-825.

Lawler, E. E., III. (1973). Motivation in work organizations. Monterey, CA: Brooks/Cole Publishing Company.

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer Publishing Co.

Levinson, D. (1978). The seasons of a man's life. New York: Alfred A. Knopf.

Lewis, R. A., & Spanier, G. B. (1979). Theorizing about the quality and stability of marriage. In W. R. Burr, R. Hill, F. I. Nye, & I. L. Reiss (Eds.), Contemporary theories about the family (Vol. 1) (pp. 268-294). New York: The Free Press.

Lewin, K. (1951). Field theory in social science. New York: Harper.

Lin, N. (1986). Conceptualizing social support. In N. Lin, A. Dean, & W. Ensel (Eds.), Social support, life events, and depression (pp. 17-30). New York: Academic Press.

Linton, R. (1936). The study of man. New York: Appleton-Century.

Mace, D. R., & Mace, V. (1980). Enriching marriages: The foundation stone of family strength. In N. Stinnett, B. Chesser, J. DeFrain, & P. Knaub (Eds.), Family strengths: Positive models for family life (pp. 89-110). Lincoln: University of Nebraska Press.

Marks, G. (1977). Multiple roles and role strain: Some notes on human energy, time and commitment. American Sociological Review, 42, 921-936.

Martin, J. A. (1984). Life satisfaction for military wives. Military Medicine, 149, 512-514.

Martin, J. A., Orthner, D. K. (1989). The "company town" in transition: Rebuilding military communities. In G. L. Bowen & D. K. Orthner (Eds.), The organization family: Work and family linkages in the U.S. military (pp. 163-177). New York: Praeger Press.

Masnick, G., & Bane, M. J. (1980). The nation's families: 1960-1990. Boston: Auburn House Publishing Company.

Mattessich, P., & Hill, R. (1987). Life cycle and family development. In M. B. Sussman & S. K. Steinmetz (Eds.), Handbook of marriage and the family (pp. 437-469). New York: Plenum Press.

McCubbin, H. I., & Lavee, Y. (1986). Strengthening Army families: A family life cycle perspective. Evaluation and Program Planning, 9, 221-231.

McCubbin, M. A., & McCubbin, H. I. (1987). Family stress theory and assessment: The T-Double ABCX Model of family adjustment and adaptation. In H. I. McCubbin & A. I. Thompson (Eds.), Family assessment inventories for research and practice (pp. 1-32). Madison, WI: University of Wisconsin-Madison.

McCubbin, H. I., & Patterson, J. M. (1983). The family stress process: The Double ABCX Model of adjustment and adaptation. In H. McCubbin, M. Sussman, & J. Patterson (Eds.), Advances and developments in family stress theory and research (pp.7-37). New York: Haworth Press.

McCubbin, H. I., Patterson, J. M., & Lavee, Y. (1983). One thousand Army families: Strengths, coping and supports. St Paul, MN: University of Minnesota.

Melson, G. F. (1983). Family adaptation to environmental demands. In H. I. McCubbin & C. R. Figley (Eds.), Stress and the family: Coping with normative transitions (Vol. 1) (pp. 149-162). New York: Brunner/Mazel.

Merton, R. K. (1957). Social theory and social structure (Rev. Ed.). New York: Free Press.

Mindle, C. H., & Habenstein, R. W. (Eds.). (1977). Ethnic families in America: Patterns and variations. New York: Elsevier.

Moen, P. (1983). The two provider family: Problems and potentials. In D. H. Olson & D. B. Miller (Eds.), Family studies yearbook (Vol. 1) (pp. 397-437). Beverly Hills, CA: Sage.

Montgomery, J. (1982). Family crisis as process. Washington, DC: University Press of America, Inc.

Moos, R. H. (1986). Work as a human context. In M. S. Pallak & R. Perloff (Eds.), Psychology and work: Productivity, change, and employment (pp. 9-52). Washington, DC: American Psychological Association.

Murphy, P. E., & Staples, W. A. (1979). A modernized family life cycle. Journal of Consumer Research, 6, 12-22.

Murray, H. A. (1938). Explorations in personality. New York: Oxford University Press.

Neenan, P. A. (1988). Perspectives, orientation, and measurement of the coping process: Literature review and measurement recommendations. Chapel Hill, NC: University of North Carolina at Chapel Hill.

Nock, S. L. (1979). The family life cycle: Empirical or conceptual tool? Journal of Marriage and the Family, 41, 15-26.

Norton, A. J. (1983). Family life cycle: 1980. Journal of Marriage and the Family, 45, 267-275.

Nye, F. I. (1967). Values, family, and a changing society. Journal of Marriage and the Family, 27, 241-247.

Office of the Deputy Chief of Staff for Personnel, U.S. Army. (1984). The Army family action plan I. Washington, DC: Author.

Olson, D., & McCubbin, H. I. (1983). Families: What makes them work. Beverly Hills: Sage.

Orthner, D. K., & Bowen, G. L. (1982). Families-in-blue: Phase II Insights from Air Force families in the Pacific. Washington, DC: SRA Corporation.

Orthner, D. K., Early-Adams, P., Devall, E., Giddings, M., Morley, R., & Stawarski, C. (1987). Community satisfaction and support programs. (Contract No. MDA903-87-C-0540). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Orthner, D. K., & Pittman, J. (1986). Family contributions to work commitment. Journal of Marriage and the Family, 48, 573-581.

Osherson, S., & Dill, D. (1983). Varying work and family choices: Their impact on men's work satisfaction. Journal of Marriage and the Family, 45, 339-346.

Pearlin, L. I., Lieberman, M. A., Menaghan, E. G., & Mullan, J. T. (1981). The stress process. Journal of Health and Social Behavior, 22, 337-356.

Pearlin, L. I., & Schooler, C. (1978). The structure of coping. Journal of Health and Social Behavior, 19, 2-21.

Pederson, F. A., & Sullivan, E. J. (1964). Relationships among geographic mobility, parental attitudes, and emotional disturbances in children. American Journal of Orthopsychiatry, 34, 575-580.

Piotrkowski, C. S., Rapoport, R. N., & Rapoport, R. (1987). Families and work. In M. B. Sussman & S. K. Steinmetz (Eds.), Handbook of Marriage and the Family (pp. 251-283). New York: Plenum Press.

Pilisuk, M., & Parks, S. H. (1983). Social support and family stress. In H. I. McCubbin, M. B. Sussman, & J. M. Patterson (Eds.), Social stress and the family: Advances and developments in family stress theory and research (pp. 137-156). New York: Haworth Press.

Pleck, J. H. (1977). The work-family role system. Social Problems, 24, 417-427.

Rapoport, R., & Rapoport, R. N. (1977). Dual-career families re-examined. New York: Harper Colophon.

Ridenour, R. I. (1984). The military, service families, and the therapist. In F. W. Kaslow & R. I. Ridenour (Eds.), The military family (pp. 1-17). New York: The Guilford Press.

Rimland, B., & Larson, G. F. (1981). The manpower quality decline. Armed Forces and Society, 7, 21-78.

Rodman, H. (1963). The lower-class value stretch. Social Forces, 42, 205-215.

Rodriguez, A. R. (1984). Special treatment needs of children of military families. In F. W. Kaslow & R. I. Ridenour (Eds.), The military family (pp. 46-70). New York: The Guilford Press.

Rogers, R. H. (1962). Improvements in the construction and analysis of family life cycle categories. Unpublished doctoral dissertation, University of Minnesota at St. Paul.

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Rotter, J. B. (1966). Generalized expectations for internal versus external control of reinforcement. Psychological Monographs: General and Applied, 80, 1-28.

Sabatelli, R. M. (1988). Exploring relationship satisfaction: A social exchange perspective on the interdependence between theory, research, and practice. Family Relations, 37, 217-222.

Sandler, I. R., & Barrera, M., Jr. (1984). Toward a multimethod approach to assessing the effects of social support. American Journal of Community Psychology, 12, 37-51.

Seashore, S. E., & Taber, T. D. (1976). Job satisfaction indicators and their correlates. In A. D. Biderman & T. F. Drury (Eds.), Measuring work quality for social reporting (pp. 89-124). New York: John Wiley & Sons.

Segal, M. W. (1986). The military and the family as greedy institutions. Armed Forces and Society, 13, 9-38.

Segal, M. W. (1988). The military and the family as greedy institutions In C. C. Moskos & F. R. Wood, The military - more than just a job? New York: Pergamon-Brassey's

Shehan, C. L. (1985, October). Social support in marriage: Conceptual and operational issues in defining supportive marital relationships. Paper presented at the Pre-Conference Workshop on Theory and Methods, National Council on Family Relations, Dallas, TX.

Sieber, S. (1974). Toward a theory of role accumulation. American Sociological Review, 39, 567-578.

Sorokin, P. A., Zimmerman, C. C., & Galphin, C. J. (1931). A systematic sourcebook in rural sociology (Vol. 2). Minneapolis, MN: University of Minnesota Press.

Spanier, G. B., Sauer, W., & Larzelere, R. (1979). An empirical evaluation of the family life cycle. Journal of Marriage and the Family, 39, 27-38.

Spiegel, J. (1982). An ecological model of ethnic families. In M. McGoldrick, J. K. Pearce, & J. Giordana (Eds.), Ethnicity and family therapy: An overview (pp. 31-51). New York: The Guilford Press.

Stawarski, C. A. (1987). Personal resources and adaptation: A review of the literature (Unpublished manuscript). Alexandria, VA: Human Resources Resource Organization.

Stinnett, N. (1979). In search of strong families. In N. Stinnett, B. Chesser, & J. DeFrain (Eds.), Building family strengths: Blueprints for action (pp. 23-30). Lincoln, NE: University of Nebraska Press.

Stinnett, N., & DeFrain, J. (1985). Secrets of strong families. Boston: Little, Brown & Company.

Stryker, S. (1972). Symbolic interaction theory: A review and some suggestions for comparative family research. Journal of Comparative Family Studies, 3, 17-32.

Stryker, S., & Statham, A. (1983). Symbolic interaction and role theory. In G. Lindzey & E. Aronsen (Eds.), Handbook of social psychology (3rd ed.) New York: Random House.

Styles, M. B. (1987a). Family characteristics: A review of the literature (Unpublished manuscript). Alexandria, VA: Human Resources Research Organization.

Styles, M. B. (1987b). Informal social support: A review of the literature (Unpublished manuscript). Alexandria, VA: Human Resources Research Organization.

Styles, M. B., Janofsky, B. J., Blankinship, D. & Bishop, S. (1988). Investigating family adaptation to Army life: Exploratory site visit findings (Contract No. MDA903-87-C-0540). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Szoc, R. (1982). Family factors critical to the retention of Naval personnel. Columbia, MD: Westinghouse Public Applied Systems.

Thibaut, J. W., & Kelley, H. H. (1959). The social psychology of groups. New York: John Wiley & Sons.

Thoits, P. A. (1982). Conceptual, methodological, and theoretical problems in studying social support as a buffer against life stress. Journal of Health and Social Behavior, 23, 145-159.

Thoits, P. A. (1987). Negotiating roles. In F. J. Crosby (Ed.), Spouse, parent, worker (pp. 11-22). New Haven: Yale University Press.

Unger, D. G., & Powell, D. R. (1980). Supporting families under stress: The role of social networks. Family Relations, 29, 556-574.

Uhlenberg, P. (1974). Cohort variations in family life cycle experiences of U.S. females. Journal of Marriage and the Family, 36, 284-292.

Valentine, C. A. (1971). Deficit, difference, and bicultural models of Afro-American behavior. Harvard Educational Review, 41, 137-157.

Vernez, G., & Zellman, G. L. (1987). Families and mission: A review of the effects of family factors on Army attrition, retention, and readiness. Santa Monica, CA: The Rand Corporation.

Voydanoff, P. (1980, October). Work-family life cycles. Paper presented at the workshop on theory construction and research methodology, National Council on Family Relations, Boston, MA.

Voydanoff, P. (1987). Work and family life. Newbury Park, CA: Sage Publications.

Walker, A. J. (1985). Reconceptualizing family stress. Journal of Marriage and the Family, 47, 827-837.

Wilensky, H. L. (1961). Life cycle, work situation, and participation in formal associations. In R. W. Kleemeier (Ed.), Aging and leisure: Research perspectives on meaningful use of time (pp. 213-242). New York: Oxford University Press.

Wilkenson, D. (1987). Ethnicity. In M. B. Sussman & S. K. Steinmetz (Eds.), Handbook of marriage and the family (pp. 183-210). New York: Plenum Press.

Wills, T. A. (1985). Supportive functions of interpersonal relationships. In S. Cohen & S. L. Syme (Eds.), Social support and health (pp. 61-82). Orlando, FL: Academic Press.

Yankelovich, D. (1981). New rules: Searching for self-fulfillment in a world turned upside down. New York: Random House.